

Graft Copolymers, Their Preparation and Use in Capillary Electrophoresis

ABSTRACT

5 The invention relates to graft copolymers, their preparation, and compositions,
such as electrophoresis separation media, containing the same; also to ultra-high
molecular weight poly(*N,N*-dimethylacrylamide) (“poly(DMA)”) polymers, their
preparation, and compositions, such as electrophoresis separation media, containing the
same; and more particularly to supports, such as capillaries, containing these polymers
10 and methods for separating biomolecules, especially polynucleotides, using capillary
electrophoresis. The graft copolymers can be prepared by, e.g., grafting polyacrylamide
units onto a poly(DMA) backbone. Separation media comprising such graft
copolymers or ultra-high molecular weight poly(DMA) polymers yield superior
performance in the analysis and separation of biomolecules by capillary electrophoresis.

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